

**ABSTRACT**

A method of preparing salt of dinitramidic acid, comprising nitration of an initial compound with a nitrating acid mixture to form dinitramidic acid in a reaction mixture. A positive ion is added to the reaction mixture and forms with the dinitramide ion an ion pair complex which precipitates in the acidic reaction mixture, and the precipitate is separated from the mixture. The remaining spent acid can be reprocessed for recovery of acid for preparation of a new nitrating acid mixture. The preferred positive ion is the guanylurea ion which gives a precipitate of guanylurea dinitramide. The precipitate can be used as starting material for preparation of other dinitramide salts, such as KDN and ADN. The guanylurea ion can be formed in situ in the process by cyanoguanidine being reacted with the reaction mixture.